

7-  
A 3 8  
9  
retrieving and displaying relationship information from said model when said selected  
element is a component of said model[.]; and  
enabling said user to select one or more relationships from said relationship information.

Please cancel Claim 16.

Claim 17 (Once Amended) line 1, please change "16" to -15-. ✓

## REMARKS

In the Office Action, the Examiner noted that Claims 1 through 20 were pending in the Application. The Examiner rejected all claims. The subject matter of Claims 1 and 2, 8 and 9, and 15 and 16 have been combined, so that Claims 1, 3 - 8, 10 - 15 and 17 - 20 are now pending in the Application. Applicants traverse the rejections below.

### I. Objection to the Claims

Claims 16 - 20 were objected to because of an informality in Claim 16. In this Amendment, Claim 16 has been canceled, and the dependency of Claim 17 has been amended. Accordingly, this objection should now be obviated, and withdrawal thereof is respectfully requested.

### II. Traversal of the Rejections over the Cited Art

The Examiner rejected Claims 1, 2, 7 - 9, and 14 - 16 under 35 U.S.C. 102(a) as being anticipated by the prior art discussed on pages 3 - 5 of the Application. The Examiner rejected Claims 3 - 6, 10 - 13 and 17 - 20 under 35 U.S.C. 103(a) as being unpatentable over the prior art discussed on pages 3 - 5 and 25 of the Application. Applicants traverse these rejections below.

The present invention discloses a technique for displaying and editing components of data which may have complex many-to-many (i.e. non-hierarchical) relationships, using a program such as a browser. The components are presented in such a way as to make the **relationships** explicitly visible, allowing a user to navigate the **relationships** in an efficient, intuitive manner that clearly aligns with the structure of the underlying object model. In a preferred embodiment, when the user **selects** one of the explicit relationships, he is presented with a list of actions tailored to that relationship. In a further enhancement, the user may define one or more filters that will be applied to the actions list before it is presented.

Independent Claim 1 has been amended to include the subject matter of Claim 2 in order to more clearly distinguish the present invention from the cited art. Claim 1 now includes “a subprocess for retrieving and displaying relationship information for said model” and “a subprocess for enabling said user to select one or more relationships from said relationship information”.

In summary, the present invention is directed to the understanding of relationships, and its claims recite the concept that relationships are selectable. This concept is not taught, suggested or disclosed in the cited art. Page 4 of the Application states that “each logical connection between panes represents a relationship.” Relative to Claim 2, the Office Action states that “once the user selects an element from the list presented, the pane to the immediate right is updated to show the next relationship”. This is not the same as the recited subject matter. The logical connection between panes represents the relationship. The “relationship” is **not** selectable in the prior art.

This is the problem with the prior art that is addressed by the present invention. The logical elements, such as the classes and methods, presented in the pane, are selectable in the prior art. However, in a complex object model, this is not enough information. Other relationships exist which cannot be presented in the hierarchical format of the cited prior art. As discussed on page 11 of the Application, “relationships are explicitly represented as elements of

the model, as are the objects (components) in that model...object models which are not strictly hierarchical in structure can be conveniently and intuitively navigated, edited, and populated using the present invention...relational databases typically have many complex relationships, which are not necessarily hierarchical in structure.” Further, “by explicitly displaying the complex relationships of the relational model, the present invention enables a user to better comprehend the underlying model...”(page 12).

Very clearly, ‘relationships’ may not be selected in the prior art. The present invention specifically addresses shortcoming. Independent Claims 1, 8 and 15 now explicitly recite that a “user may select one or more relationships from said relationship information”. In the prior art, logical elements, such as classes and methods, may be selected, not relationships. Accordingly, Applicants submit that independent Claims 1, 8 and 15 patentably distinguish over the cited art. While it follows that the dependent claims also patentably distinguish over the cited art, differences between some of the dependent claims and the cited art will now be discussed.

Dependent Claim 4 recites that “said action list comprises a list of actions tailored to said selected one or more relationships.” In the prior art, relationships may not be selected. And the prior art does not teach the use of an action list. There is no cited teaching of an action list used in association with a selected relationship. Accordingly, Applicants submit that Claim 4, as well as dependent Claims 11 and 18, which include similar subject matter, patentably distinguish over the cited art.

III. Summary



Applicants have presented technical explanations and arguments fully supporting their position that the pending claims contain subject matter which is not taught, suggested or disclosed by the prior art discussed in the Application. Accordingly, Applicants submit that the present Application is in a condition for Allowance. Reconsideration of the claims and a Notice of Allowance are earnestly solicited.

RECEIVED  
AUG-4 2000  
TC-1700 MAIL ROOM

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Gregory M. Doudnikoff".

Gregory M. Doudnikoff  
Attorney for Applicant  
Reg. No. 32,847

GMD:ld

Docket No: CR9-98-062  
PHONE: 919-254-1288  
FAX: 919-254-4330